

3. The suborder Crossopterygii of Huxley contains two distinct types of "lobate fin," namely:—the "obtusely lobate," with a transverse series of cartilaginous rods; and the "acutely lobate" with an axial skeleton. Prof. Huxley has already drawn attention to the similarity between the paddles of *Lepidosiren* and the Crossopterygians; but only the acutely "lobate" type agrees with the structure of the Dipnoous limb. *Polypiterus*, *Cœlacanthus*, &c., which are provided with fins of the former type, are genera sufficiently distinguished also by other characters to be placed in a separate suborder.

XXVI.—On a new Genus and Species of Hydroid Zoophyte
(*Cladocoryne floccosa*). By W. D. ROTCH, Esq.

CLADOCORYNE, nov. gen.

Generic character.—Stem simple or branched, rooted by a creeping filiform stolon, the whole sheathed in a thin chitinous tube, smooth or very sparingly annulated. Polypites terminal, clavate, with simple and branched capitate tentacula; the former set in a single row round the mouth, the latter in several whorls round the body, and multicapitate; with a prominent tubercle composed of thread-cells between each tentacle in the anterior and in the posterior rows. Reproduction unknown.

Cladocoryne has affinity with the families of Corynidae and Stauridiidae, but is, I think, more closely allied to the former. It agrees with the Stauridiidae in having tentacles of two kinds, and resembles *Cladonema radiatum*, which has the tentacles of the gonozooid branched. The stem, general form, and polypite of *Cladocoryne* very closely resemble those of *Coryne* and *Syncoryne*, the branching of some of the tentacles in *Cladocoryne* being the most marked point of difference. The tubercles or bosses round the mouth and base of the polypite mark a point of resemblance between *Cladocoryne* and *Hydranthea*.

The reproductive history of *Cladocoryne* is unknown; and it is consequently uncertain whether it most resembles *Coryne* or *Syncoryne*.

Its present place must be provisional; and, until more is known of its reproduction, it might be placed in the family Corynidae, after the genus *Zunclea*, in the Rev. T. Hincks's work on British Hydroid Zoophytes.

Cladocoryne floccosa, n. sp.

Stem slender, generally simple or very sparingly branched, often with a bend; polypary of a light straw-colour, generally smooth, but sometimes very slightly and irregularly annulated.

Polypites generally separate, and ranged at irregular intervals along the creeping filiform stolon; long, linear, and very slender, of a reddish-brown colour, merging at the base into the colour of the stem; the oral extremity of an opaque white; a silvery-white tubercle or boss of thread-cells between each tentacle in the anterior and in the posterior row.

Tentacles very long and tapering, capitate, of two kinds—simple and branched; one row of simple capitate tentacles, four to eight in number, immediately round the mouth, and three or four rows of branched tentacles set in whorls round the body, with three to four tentacles in each whorl, each of the branched tentacles having from six to fifteen short capitate ramuli set in somewhat irregular whorls round the tentacles, and terminating in three of the capitate ramuli of nearly equal length.

Gonophores not known.

Height from a $\frac{1}{4}$ to $\frac{1}{2}$ an inch.

The form and size of the tentacles are the most prominent points in *C. floccosa*: the branched tentacles are all long, and increase in length up to the middle whorl, and then diminish in length towards the oral whorl, those in the middle whorl being as long as the body of the polypite; the tentacles are pellucid, and taper gradually from the base; the ramuli are similar in appearance to the tentacles of *Coryne vaginata*.

The stem is rarely and sparingly branched.

The pearly bosses of thread-cells add considerably to the beauty of this zoophyte.

The polypites are generally separate, and rise at irregular intervals from the stolon, thus presenting a very different appearance from the long and branched tufts of *Coryne* and *Syncoryne*. The ramuli on the tentacles are pellucid, and give a fleecy aspect to the zoophyte as it is waved to and fro in the tide.

Hab. On stones at low tide at Herm, near Guernsey.

The Rev. T. Hincks, who has kindly corrected the above description, tells me that this species has "barbed thread-cells, very much resembling those of *Hydra*," and that he has met with a single specimen of *C. floccosa* among a quantity of Gulf-weed.